



Billing Code: 5001-06

DEPARTMENT OF DEFENSE

Office of the Secretary

[Transmittal No. 16-15]

36(b)(1) Arms Sales Notification

AGENCY: Department of Defense, Defense Security Cooperation Agency.

ACTION: Notice.

SUMMARY: The Department of Defense is publishing the unclassified text of a section 36(b)(1) arms sales notification. This is published to fulfill the requirements of section 155 of Public Law 104-164 dated July 21, 1996.

FOR FURTHER INFORMATION CONTACT: Pam Young, DSCA/SA&E-RAN, (703) 697-9107.

The following is a copy of a letter to the Speaker of the House of Representatives, Transmittal 16-15 with attached Policy Justification and Sensitivity of Technology.

Dated: December 12, 2016.

Aaron Siegel,
Alternate OSD Federal Register Liaison Officer,
Department of Defense.



DEFENSE SECURITY COOPERATION AGENCY

201 12TH STREET SOUTH, STE 203
ARLINGTON, VA 22202-5408

DEC 07 2016

The Honorable Paul D. Ryan
Speaker of the House
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 16-15, concerning the Department of the Army's proposed Letter(s) of Offer and Acceptance to the Government of the United Arab Emirates for defense articles and services estimated to cost \$3.5 billion. After this letter is delivered to your office, we plan to issue a news release to notify the public of this proposed sale.

Sincerely,

J.W. Rikey
Vice Admiral, USN
Director

Enclosures:

1. Transmittal
2. Policy Justification
3. Sensitivity of Technology
4. Regional Balance (Classified Document Provided Under Separate Cover)



Transmittal No. 16-15

Notice of Proposed Issuance of Letter of Offer
Pursuant to Section 36(b)(1)
of the Arms Export Control Act, as amended

(i) Prospective Purchaser: United Arab Emirates

(ii) Total Estimated Value:

Major Defense Equipment* \$1.68 billion

Other \$1.82 billion

TOTAL \$3.50 billion

(iii) Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:

Major Defense Equipment (MDE):

Twenty-eight (28) AH-64E Remanufactured Apache Attack Helicopters

Nine (9) new AH-64E Apache Attack Helicopters

Seventy-six (76) T700-GE-701D Engines (56 remanufactured, 18 new, 2 spares)

Thirty-nine (39) AN/ASQ-170 Modernized Target Acquisition and Designation

Sight/AN/AAR-11 Modernized Pilot Night Vision Sensors (28 remanufactured, 9 new, 2 spares)

Thirty-two (32) remanufactured AN/APR-48B Modernized – Radar Frequency Interferometers

Forty-six (46) AAR-57 Common Missile Warning Systems (31 remanufactured, 9 new, 6 spares)

Eighty-eight (88) Embedded Global Positioning Systems with Inertial Navigation (72 new, 16 spares)

Forty-four (44) Manned-Unmanned Teaming-International (MUMTi) Systems (28 remanufactured, 9 new, 7 spares)

Fifteen (15) new MUMTi System Upper Receivers

Non-MDE:

Training devices, helmets, simulators, generators, transportation, wheeled vehicles and organization equipment, spare and repair parts, support equipment, tools and test equipment, technical data and publications, personnel training and training equipment, U.S. government and contractor engineering, technical, and logistics support services, and other related elements of logistics support.

(iv) Military Department: Army (AE-B-GUA)

(v) Prior Related Cases, if any: FMS case: AE-B-JAH-02 Jan 92-\$617M, FMS case: AE-B-UDE-06 Jan 00-\$195M, FMS case: AE-B-UDN-28 Nov 05-\$755M, FMS case: AE-B-ZUL-21

Oct 09-\$252M, FMS case: AE-B-ZUF-22 Dec 08-\$174M

(vi) Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid: None

(vii) Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold: See Annex Attached.

(viii) Date Report Delivered to Congress: December 7, 2016

*as defined in Section 47(6) of the Arms Export Control Act.

POLICY JUSTIFICATION

United Arab Emirates – Apache AH-64E Helicopters and Services

The Government of the United Arab Emirates (UAE) has requested a possible sale of twenty-eight (28) AH-64E Remanufactured Apache Attack Helicopters; nine (9) new AH-64E Apache Attack Helicopters; Seventy-six (76) T700-GE-701D Engines (56 remanufactured, 18 new, 2 spares); thirty-nine (39) AN/ASQ-170 Modernized Target Acquisition and Designation Sight/AN/AAR-11 Modernized Pilot Night Vision Sensors (28 remanufactured, 9 new, 2 spares); thirty-two (32) remanufactured AN/APR-48B Modernized – Radar Frequency Interferometers; forty-six (46) AAR-57 Common Missile Warning Systems (31 remanufactured, 9 new, 6 spares); eighty-eight (88) Embedded Global Positioning Systems with Inertial Navigation (72 new, 16 spares); forty-four (44) Manned-Unmanned Teaming-International (MUMTi) systems (28 remanufactured, 9 new, 7 spares); and fifteen (15) new MUMTi System Upper Receivers. This request also includes training devices, helmets, simulators, generators, transportation, wheeled vehicles and organization equipment, spare and repair parts, support equipment, tools and test equipment, technical data and publications, personnel training and training equipment, U.S. government and contractor engineering, technical, and logistics support services, and other related elements of logistics support. Total estimated program cost is \$3.5 billion.

This proposed sale will enhance the foreign policy and national security of the U.S. by helping to improve the security of a friendly country that has been and continues to be an important force for political stability and economic progress in the Middle East.

The proposed sale will improve the UAE's capability to meet current and future threats and provide greater security for its critical infrastructure. The UAE will use the enhanced capability to strengthen its homeland defense. The UAE will have no difficulty absorbing these Apache aircraft into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The prime contractor will be Boeing in Mesa, AZ and Lockheed Martin in Orlando, FL. Offsets

are a requirement of doing business in UAE; however offsets are negotiated directly between the Original Equipment Manufactures or other vendors and the UAE government and details are not known at this time.

Implementation of this proposed sale will not require the assignment of contractor representatives to the UAE.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

Transmittal No. 16-15

Notice of Proposed Issuance of Letter of Offer
Pursuant to Section 36(b)(1)
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Annex
Item No. vii

(vii) Sensitivity of Technology:

1. The AH-64E Apache Attack Helicopter weapon system contains communications and target identification equipment, navigation equipment, aircraft survivability equipment, displays, and sensors. The airframe itself does not contain sensitive technology; however, the pertinent equipment listed below will be either installed on the aircraft or included in the sale:

a. The AN/APG-78 Fire Control Radar (FCR) is an active, low-probability of intercept, millimeter-wave radar, combined with a passive AN/APR-48B Modernized Radar Frequency Interferometer (M-RFI) mounted on top of the helicopter mast. The FCR Ground Targeting Mode detects, locates, classifies and prioritizes stationary or moving armored vehicles, tanks and mobile air defense systems as well as hovering helicopters, helicopters, and fixed wing aircraft in normal flight. If desired, the radar data can be used to refer targets to the regular electro-optical Modernized Target Acquisition and Designation Sight (MTADS). This information is provided in a form that cannot be extracted by the foreign user. The content of these items is classified SECRET. User Data Module (UDM) on the RFI processor, contains the Radio Frequency threat library. The UDM, which is a hardware assemblage, is classified CONFIDENTIAL when programmed with threat parameters, threat priorities and/or techniques derived from U.S. intelligence information.

b. The AN/ASQ-170 Modernized Target Acquisition and Designation Sight/AN/AAQ-11 Pilot Night Vision Sensor (MTADS/PNVS) provides day, night, and limited adverse weather target information, as well as night navigation capabilities. The PNVS provides thermal imaging that permits nap-of-the-earth flight to, from, and within the battle area, while TADS provides the co-pilot gunner with search, detection, recognition, and designation by means of Direct View Optics (DVO), E²television, and Forward Looking Infrared (FLIR) sighting systems that may be used

singularly or in combinations. Hardware is UNCLASSIFIED. Technical manuals for authorized maintenance levels are UNCLASSIFIED. Reverse engineering is not a major concern.

c. The AN/APR-48B Modernized Radar Frequency Interferometer (M-RFI) is an updated version of the passive radar detection and direction finding system. It utilizes a detachable UDM on the M-RFI processor, which contains the Radar Frequency (RF) threat library. The UDM, which is a hardware assemblage item is classified CONFIDENTIAL when programmed. Hardware becomes CLASSIFIED when populated with threat parametric data. Releasable technical manuals are Unclassified/restricted distribution.

d. The AAR-57 Common Missile Warning System (CMWS) detects energy emitted by threat missiles in-flight, evaluates potential false alarm emitters in the environment, declares validity of threat and selects appropriate countermeasures. The CMWS consists of an Electronic Control Unit (ECU), Electro-Optic Missile Sensors (EOMSs), and Sequencer and Improved Countermeasures Dispenser (ICMD). The ECU hardware is classified CONFIDENTIAL; releasable technical manuals for operation and maintenance are classified SECRET.

e. The AN/APR-39 Radar Signal Detecting Set is a system that provides warnings of radar-directed air defense threats and allows appropriate countermeasures. This is the 1553 databus-compatible configuration. The hardware is classified CONFIDENTIAL when programmed with U.S. threat data; releasable technical manuals for operation and maintenance are classified CONFIDENTIAL; releasable technical data (technical performance) is classified SECRET. The system can be programmed with threat data provided by the purchasing country.

f. The AN/AVR-2B Laser Warning Set is a passive laser warning system that receives, processes, and displays threat information resulting from aircraft illumination by lasers on the multi-functional display. The hardware is classified CONFIDENTIAL; releasable technical manuals for operation and maintenance are classified SECRET.

g. The Embedded Global Positioning System/Inertial Navigation System plus Multi- Mode Receiver (EGI+MMR) The aircraft has two EGIs which use internal accelerometers, rate gyro measurements, and external sensor measurements to estimate the aircraft state, provides aircraft flight and position data to aircraft systems. The EGI is a velocity-aided, strap down, ring laser gyro based inertial unit. The EGI unit houses a GPS receiver. The receiver is capable of operating in either non-encrypted or encrypted. When keyed, the GPS receiver will automatically use anti-spoof/jam capabilities when they are in use. The EGI will retain the key through power on/off/on cycles. Because of safeguards built into the EGI, it is not considered classified when keyed. Integrated within the EGI is an Inertial Measurement Unit (IMU) for processing functions. Each EGI also houses a Multi-Mode Receiver (MMR). The MMR is incorporated to provide for reception of ground based NAVAID signals for instrument aided flight. Provides IMC I IFR integration and certification of improved Embedded Global Positioning System and Inertial (EGI) unit, with attached MMR, with specific cockpit instrumentation allows Apaches to operate within the worldwide IFR route structure. Also includes integration of the Common Army Aviation Map (CAAM), Area Navigation (RNAV), Digital Aeronautical Flight Information File (DAFIF) and Global Air Traffic Management

(GATM) compliance.

h. Manned-Unmanned Teaming-International (MUMT-I) provides Manned-Unmanned Teaming with Unmanned Aerial Systems (UASs), other Apaches and other interoperable aircraft and land platforms. Provides ability to display real-time UAS sensor information to aircraft and transmit MTADS video. Capability to receive video and metadata from Interoperability Profile compliant (IOP) as well as legacy systems. It is a data link for the AH-64E that provides a fully integrated multiband, interoperable capability that allows pilots to receive off-board sensor video streaming from different platforms in non-Tactical Common Data Link (TCDL) bands. The MUMT- I data link can retransmit Unmanned Aerial System (UAS) or Apache Modernized Target Acquisition Designation Sight full-motion sensor video and metadata to another MUMT-I-equipped Apache. It can also transmit to ground forces equipped with the One Station Remote Video Terminal. It provides Apache aircrews with increased situational awareness and net-centric interoperability while significantly reducing sensor-to-shooter timelines. This combination results in increased survivability of Apache aircrews and ground forces by decreasing their exposure to hostile fire.

i. Link 16 is a military tactical data exchange network. Its specification is part of the family of Tactical Data Links. Link 16 provides aircrews with enhanced situational awareness and the ability to exchange target information to Command and Control (C2) assets via Tactical Digital Information Link-Joint (TADIL-J). Link 16 can provide a range of combat information in near-real time to U.S. and allies' combat aircraft and C2 centers. This will contribute to the integrated control of fighters by either ground-based or airborne controllers and will greatly increase the fighters' situational awareness and ability either to engage targets designated by controllers or to avoid threats, thereby increasing mission effectiveness and reducing fratricide and attrition. The Link 16 enables the Apache to receive information from the command-and-control platforms and enables it to share this data with all the other services, making it more efficient at locating and prosecuting targets. The material solution for the AH-64E is currently the Small Tactical Terminal (SIT) KOR-24A from Harris to satisfy its requirement for an Airborne and Maritime/Fixed Station (AMF) Small Airborne Link 16 Terminal (SALT). The SIT is the latest generation of small, two-channel, Link 16 and VHF/UHF radio terminals. While in flight, the SIT provides simultaneous communication, voice or data, on two key waveforms.

2. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements, the information could be used to develop countermeasures which might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.

3. A determination has been made that the recipient country can provide the same degree of protection for the sensitive technology being released as the U.S. Government. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification.

4. All defense articles and services listed in this transmittal have been authorized for release and

export to the Government of the United Arab Emirates.

[FR Doc. 2016-30225 Filed: 12/15/2016 8:45 am; Publication Date: 12/16/2016]